

Fig. 1

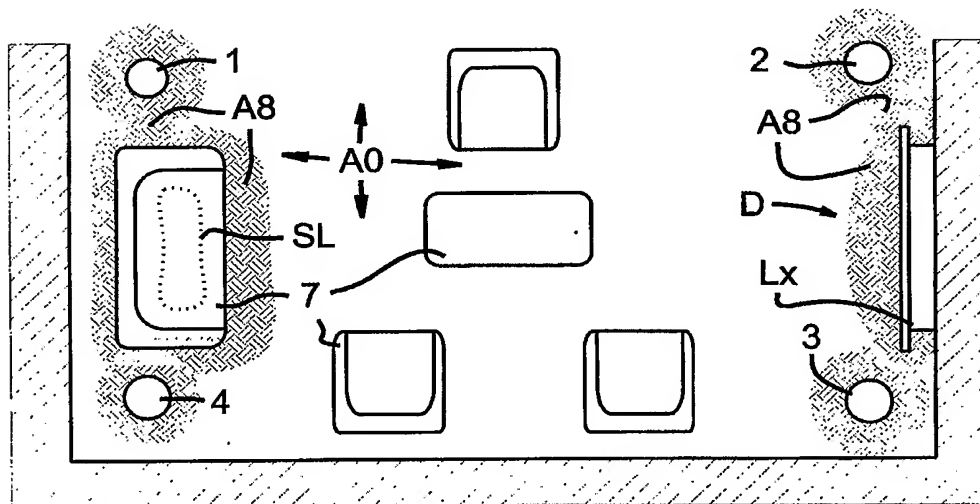
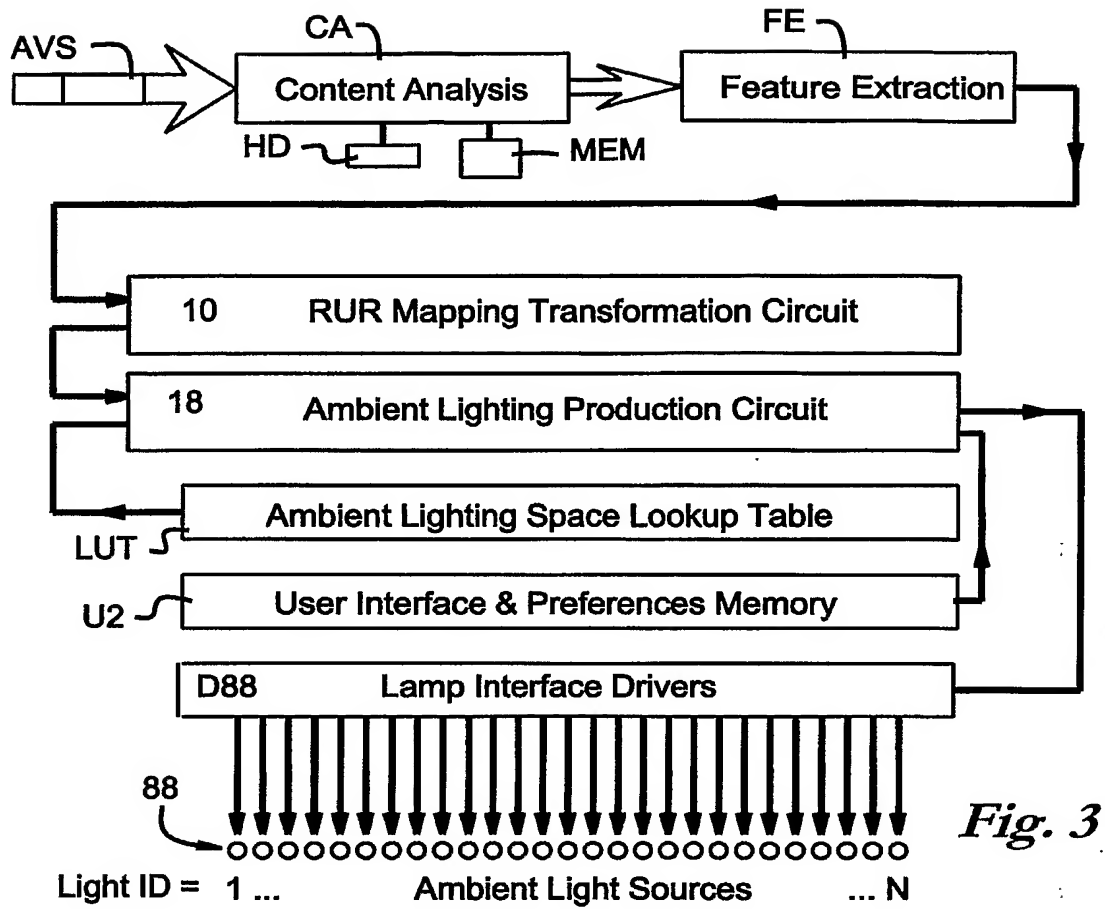


Fig. 2



$$R_{avg} = \frac{\sum_{i=1}^n \sum_{j=1}^m R_{ij}}{n \times m}$$

Fig. 4

— Prior Art —

$$\begin{bmatrix} X \\ Y \\ Z \end{bmatrix} = \begin{bmatrix} X_{r, max} & X_{g, max} & X_{b, max} \\ Y_{r, max} & Y_{g, max} & Y_{b, max} \\ Z_{r, max} & Z_{g, max} & Z_{b, max} \end{bmatrix} \begin{bmatrix} R \\ G \\ B \end{bmatrix}$$

M

Fig. 5

$$\begin{bmatrix} X \\ Y \\ Z \end{bmatrix} = M_1 * \begin{bmatrix} R \\ G \\ B \end{bmatrix}$$

Video Display D

Fig. 6

$$\begin{bmatrix} X \\ Y \\ Z \end{bmatrix} = M_2 * \begin{bmatrix} R' \\ G' \\ B' \end{bmatrix}$$

Ambient Light Sources 88

Fig. 7

$$\begin{bmatrix} R' \\ G' \\ B' \end{bmatrix} = M_2^{-1} * M_1 * \begin{bmatrix} R \\ G \\ B \end{bmatrix}$$

Fig. 8

— Prior Art —

$$M = \begin{bmatrix} s_r x_r & s_g x_g & s_b x_b \\ s_r y_r & s_g y_g & s_b y_b \\ s_r z_r & s_g z_g & s_b z_b \end{bmatrix}$$

Fig. 9

$$\begin{bmatrix} s_r \\ s_g \\ s_b \end{bmatrix} = \begin{bmatrix} x_w \\ y_w \\ z_w \end{bmatrix} \begin{bmatrix} x_r & x_g & x_b \\ y_r & y_g & y_b \\ z_r & z_g & z_b \end{bmatrix}^{-1}$$

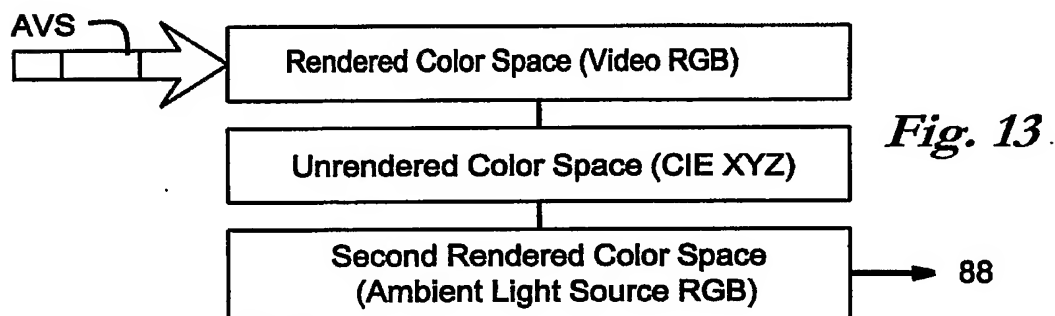
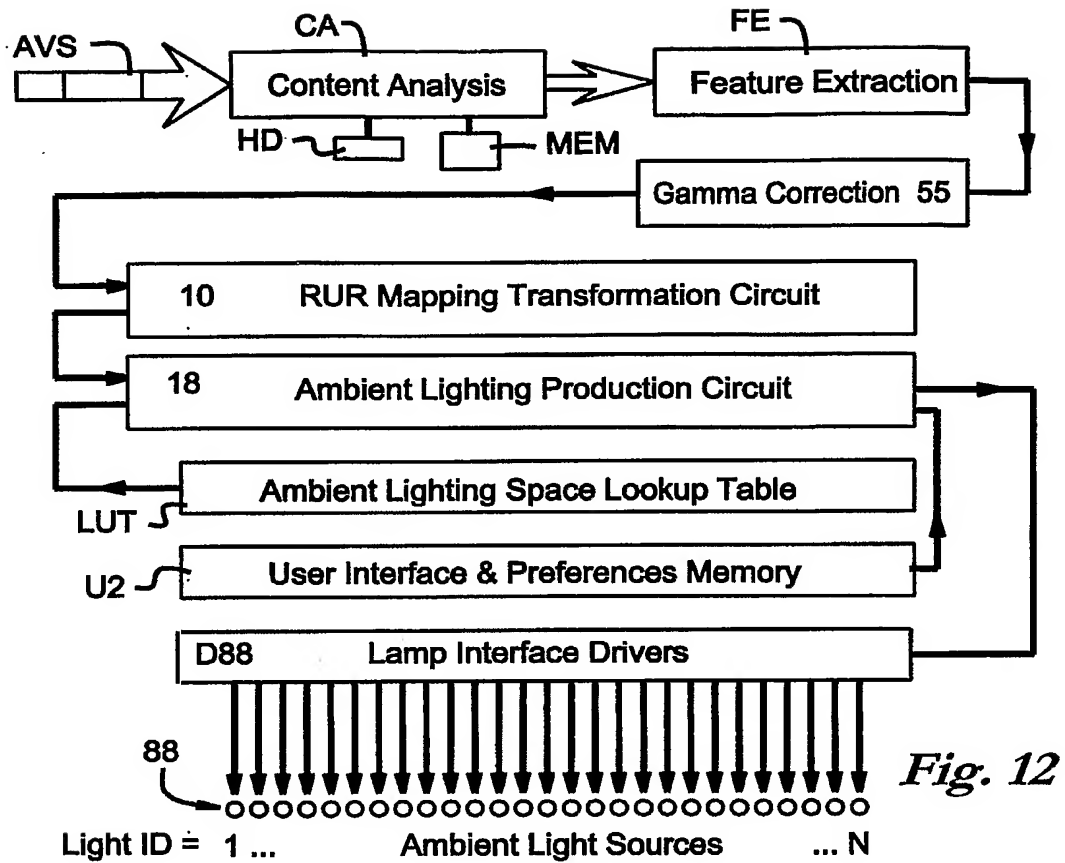
— Prior Art —

Fig. 10

$$\begin{bmatrix} s_r \\ s_g \\ s_b \end{bmatrix} \begin{bmatrix} x_r & x_g & x_b \\ y_r & y_g & y_b \\ z_r & z_g & z_b \end{bmatrix} = \begin{bmatrix} x_w \\ y_w \\ z_w \end{bmatrix}$$

— Prior Art —

Fig. 11



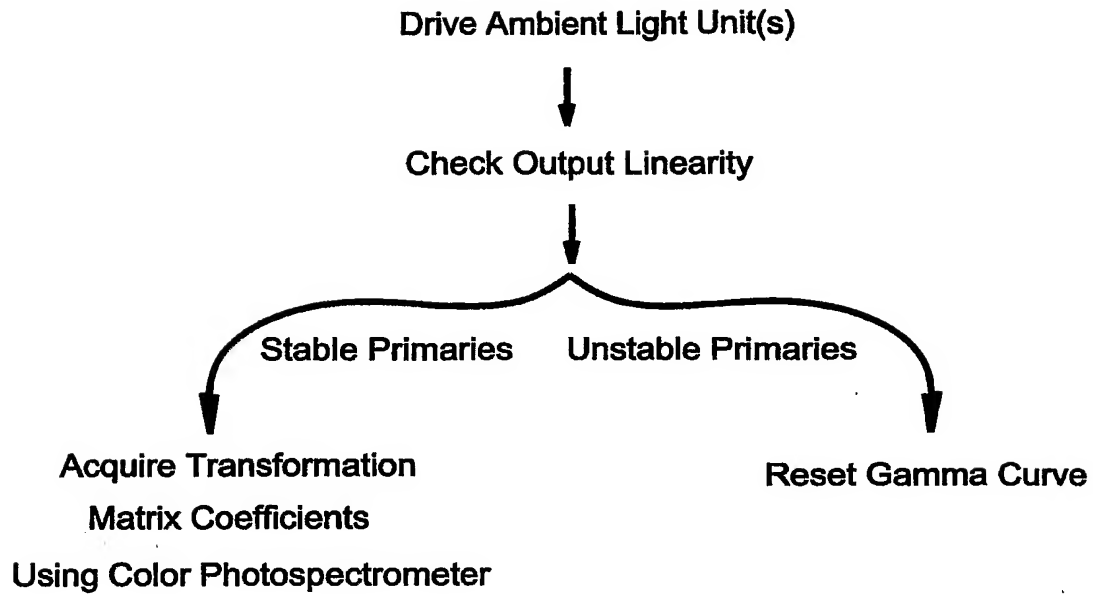
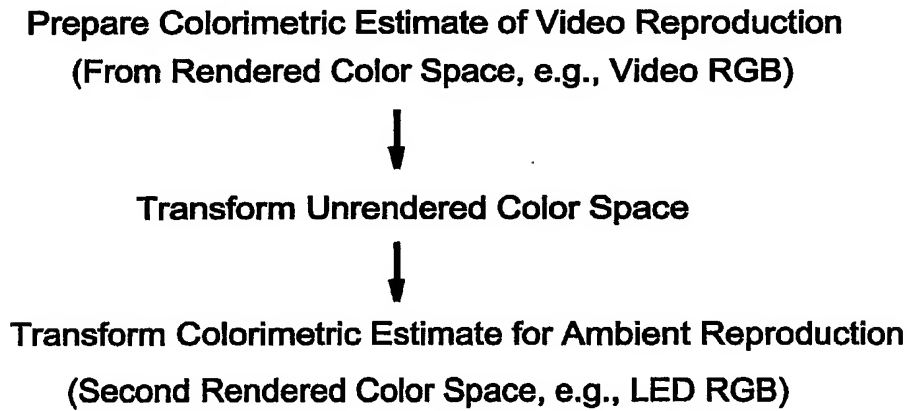
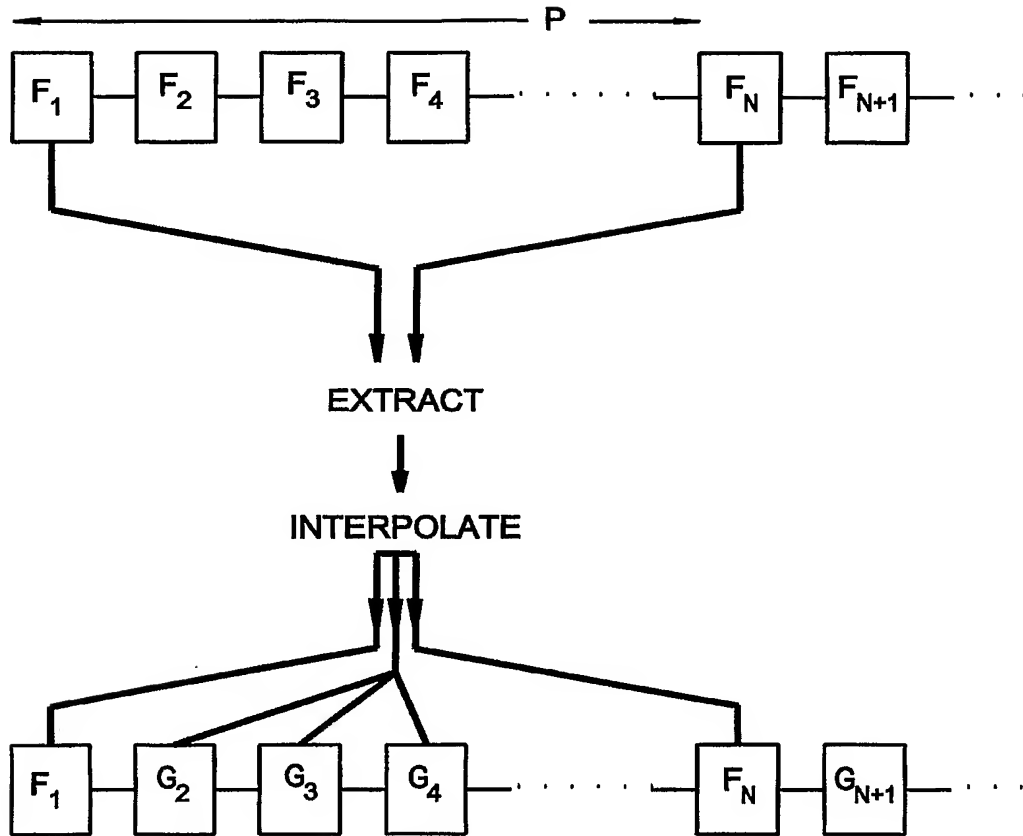
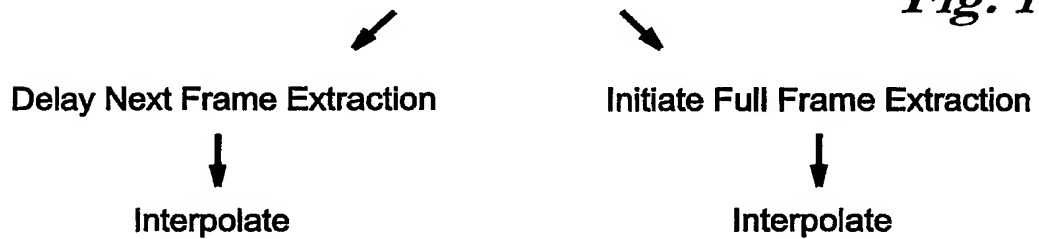
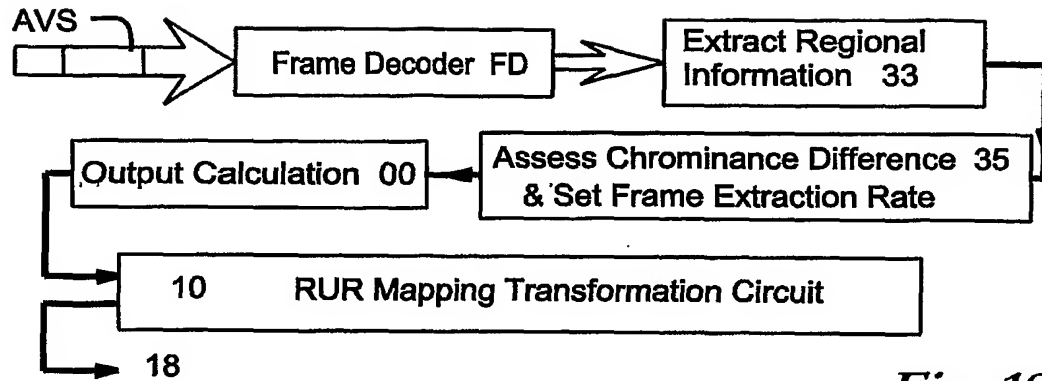
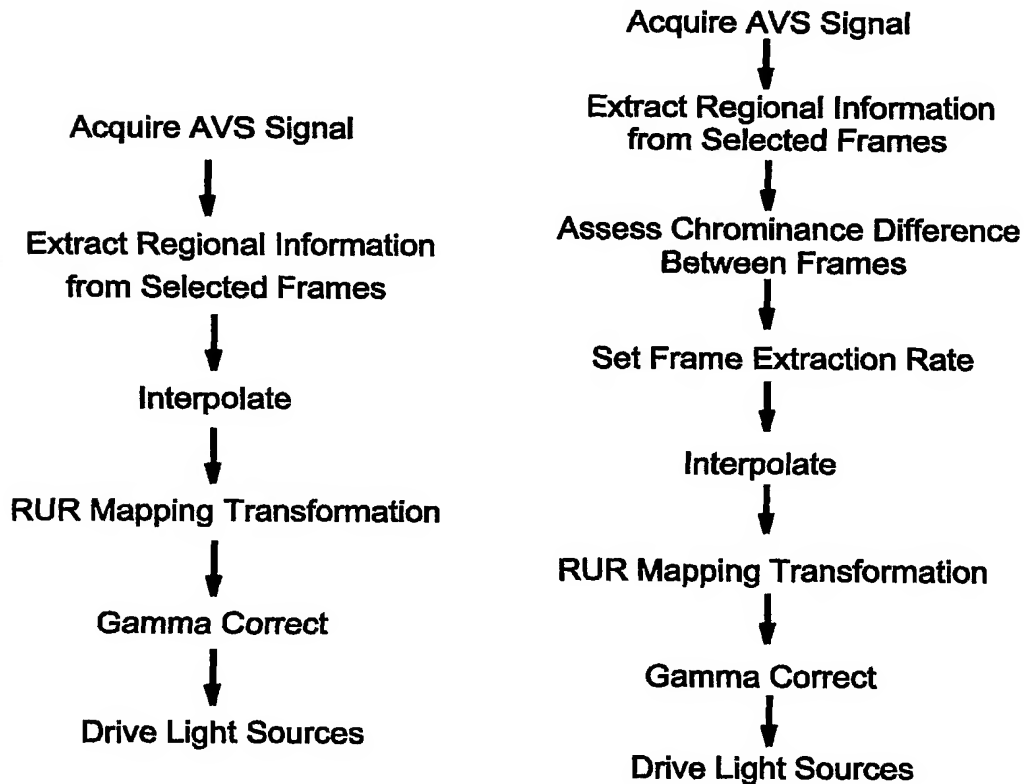
*Fig. 14**Fig. 15*

Fig. 16

Abbreviated Chrominance Assessment

Fig. 17

*Fig. 18**Fig. 19**Fig. 20*